

(12) **United States Patent**
Hsiao et al.

(10) **Patent No.:** **US 9,543,399 B2**
(45) **Date of Patent:** **Jan. 10, 2017**

(54) **DEVICE HAVING SLOPED GATE PROFILE AND METHOD OF MANUFACTURE**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 46 days.

(21) Appl. No.: **14/245,795**

(22) Filed: **Apr. 4, 2014**

(65) **Prior Publication Data**

US 2015/0287798 A1 Oct. 8, 2015

(51) **Int. Cl.**

H01L 21/4763 (2006.01)
H01L 29/423 (2006.01)
H01L 29/78 (2006.01)
H01L 29/66 (2006.01)
H01L 29/51 (2006.01)
H01L 29/40 (2006.01)
H01L 29/49 (2006.01)

(52) **U.S. Cl.**

CPC **H01L 29/42376** (2013.01); **H01L 29/401** (2013.01); **H01L 29/512** (2013.01); **H01L 29/513** (2013.01); **H01L 29/518** (2013.01);

H01L 29/6656 (2013.01); **H01L 29/66545** (2013.01); **H01L 29/78** (2013.01); **H01L 29/7833** (2013.01); **H01L 29/4966** (2013.01); **H01L 29/517** (2013.01)

(58) **Field of Classification Search**

CPC H01L 21/823807
See application file for complete search history.

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(57) **ABSTRACT**

A semiconductor device having an open profile gate electrode, and a method of manufacture, are provided. A funnel-shaped opening is formed in a dielectric layer and a gate electrode is formed in the funnel-shaped opening, thereby providing a gate electrode having an open profile. In some embodiments, first and second gate spacers are formed alongside a dummy gate electrode. The dummy gate electrode is removed and upper portions of the first and second gate spacers are removed. The first and second gate spacers may be formed of different materials having different etch rates.

21 Claims, 3 Drawing Sheets

